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DATASHEET

ENDURA PL35Q

Long Life Intel® Q35 Core™ 2 Duo Micro ATX Embedded Motherboard

NEXTGEN PERFORMANCE

The Endura PL35Q ATX is based on the latest Intel Q35 Express chipset which delivers support for Intel Core™ 2 Duo processors and the upcoming Intel Core™ 2 Quad processors bringing higher performance in combination with greater energy efficiency. The Front Side Bus support is extended up to 1333MHz for use with nextgen 45nm processors. The PL35Q also supports faster DDR2-800 dual channel memory.

ADVANCED I/O

The Endura PL35Q comes with additional USB 2.0 ports with 6 on the rear I/O panel, 2 on-board connectors and 4 via on-board headers. Four SATA 3 Gbps ports are available, one of which also supports eSATA for use with external drives at a distance of up to 2m. A x4 PCI Express slot provides an interface for use high bandwidth data capture devices, such as used in medical ultrasound systems.

A range of long life embedded processors are available for use with the Endura PL35Q. These include the Core™ 2 Duo E6400, E4300 and Celeron processors for a choice of scalable options to suit the price / performance needs of the application.

IMAGING SOLUTIONS

The Endura PL35Q has an integrated Intel GMA 3100 graphics controller for exceptional 3D graphics performance. It is also equipped with an optional DVI-D interface for use with flat panel displays and an S-Video port for use with TV monitors and video printers. A x16 PCI Express slot is available for graphics acceleration cards for applications with more demanding imaging requirements.

LONG LIFE

With a projected life time of up to 7 years, the Endura PL35Q is designed for the needs of embedded system designers. This is backed up by full revision control, change management and strong engineering support from RadiSys.

FEATURE SUMMARY

- 9.6" x 9.6" MicroATX
- Intel Core™ 2 Duo, Core™ 2 Quad and Celeron processors
- Intel Q35 Express chipset
- 667/800/1333MHz Front-Side Bus
- 4 DIMM sockets
- Up to 8GB DDR2-667/800 memory
- Dual-Channel memory support
- Intel GMA 3100 Graphics
- x16 PCI Express graphics slot
- x4 PCI Express slot
- x1 PCI Express slot
- PCI slot
- VGA output
- Dual independent displays
- Intel High Definition Audio
- 12 USB 2.0 ports
- 2 RS-232 serial ports
- PS/2 keyboard and mouse
- 4 SATA 3 Gbps ports
- eSATA
- Ultra ATA100 port
- Phoenix BIOS TrustedCore™
- System monitoring
- Automatic fan speed control
- ACPI 3.0
- RoHS compliant

Endura PL35Q Specifications

Form Factor	Size	MicroATX motherboard, 9.6" x 9.6", 240mm x 240mm, 6-layer PCB
Processor	Type	Intel® Core™ 2 Duo, Core™ 2 Quad and Celeron® processors
	Socket	LGA775 socket
	FSB	800MHz, 1066MHz and 1333MHz system bus
Chipset	Type	Intel® Q35 Express chipset with Intel® ICH9
Memory	Type	Four sockets for DDR2-667 and DDR2-800 DIMM modules
	Capacity	Up to 8GB of system memory
	Performance	Dual-Channel memory
Video	Type	Intel® Graphics Media Accelerator 3100 integrated video Dual independent video
	Resolution	2048 x 1536 (QXGA) at 75Hz and 32-bit color
	Graphics Acceleration	x16 PCI Express graphics slot with support for Media Expansion Cards
	Video Outputs	VGA, DVI-D (option), S-Video (option) MUX to select SDVO on x16 graphics slot or DVI-D / S-Video interfaces
Audio	Type	Intel® High Definition Audio using Realtek ALC883 eight channel CODEC
	Connectors	3 audio jacks for Line In, Line Out, Microphone On-board CD-ROM audio input header
Ethernet	Controller	Gigabit Ethernet using the integrated MAC and Intel 82566DM PHY
Expansion	PCI Express	x16 PCI Express graphics slot x4 PCI Express slot x1 PCI Express slot
	PCI	One PCI 2.3 compliant slot
Power Management	ACPI	ACPI 3.0
System Management	System Monitoring	Voltage, temperature and fan monitoring with three 4-pin fans
		Lithium cell voltage monitoring
	Fans	Automatic fanspeed control based on thermal monitoring
	SMbus	SMbus header
Power Supply	Connector	Standard 24-pin ATX power supply connector with 4-pin ATX 12V connector
Battery	Type	Lilthium coin cell (5 years operating life typical)
BIOS	Type	Phoenix BIOS TrustedCore™ with customizable logo and BIOS settings
I/O	USB	12 USB 2.0 ports – 6 on rear I/O, 2 on-board and four on headers
	Serial Ports	Two RS232 serial ports on headers
Disks	SATA	Four SATA 3Gb/s ports, one is eSATA ready
	IDE	One Ultra ATA100 interface
Operating Systems		Windows XP, Windows XPe, Windows Vista, Linux, Solaris

Safety Compliance		Evaluated in accordance with UL60950, EN60950 and IEC60950
EMC Compliance		Evaluated in accordance with EN55022, EN55024 and FCC Part 15 Class B
Environment	Operating Temp.	0°C to 55°C
	Storage Temp.	-40°C to 85°C
	Relative Humidity	5% to 95% non-condensing

Ordering Information

Toll-Free: 800-950-0044
Phone: 503-615-1100
Support: 866-385-6167
Call for pricing and availability. Refer to the order codes below.

DESCRIPTION:

PL35Q without DVI and S-Video

Order Code: PLV03-0-0

PL35Q with DVI and S-Video

Order Code: PLVDS03-0-0

I/O Shield for either product

Order Code: IOSHLD-PL

Embedded Processor Support

Intel Core™ 2 Duo E6400

Intel Core™ 2 Duo E4300

Intel Pentium Dual-Core E2160

Intel Celeron 440

Contact Information

www.radisys.com
info@radisys.com
Channels and other locations

Corporate Headquarters

5445 NE Dawson Creek Dr.
Hillsboro, OR 97124 USA
Phone: 503-615-1100
Fax: 503-615-1121
Toll-Free: 800-950-0044
Support: 866-385-6167
EMEA: +49 811 555457-0
China: 86.21.50804062